

# **ASSEMBLY FOR SEALING ELECTRICAL LEADS TO INTERNAL ELECTRICAL DEVICE**

## **Abstract of Disclosure**

An electrical assembly that prevents contaminants from migrating to the coil windings within an encapsulant forming the main housing through the use of a sealing assembly located within an over-molded, thermoplastic encapsulant. Before over-molding, an elastomeric seal is installed on each lead wire to be sealed, and this wire/seal subassembly is then inserted into a seal housing made from the same basic thermoplastic as the encapsulant forming the housing. The seal housing has one or more continuous ribs, with sharp edges, that circumvent the outer surface of the seal housing. During over-molding to form the main housing, the molten encapsulant surrounds the seal housing and melts the tips of the ribs. Upon cooling, the thermoplastic solidifies and the encapsulant bonds to the seal housing along each of its ribs.

DRAFT - PENDING EXAMINER REVIEW